Crater Lake

National Park Service
U.S. Department of the Interior

Crater Lake National Park

Weather

Unpredictable and Beautiful

Weather plays a dramatic role at Crater Lake National Park. Winter, especially, shapes the landscape. Snow generally begins to accumulate each year in October and doesn't melt in most places until the following June. Summer weather is more predictable, with warm, dry days, blue skies and cool nights. Nevertheless, there may be days even in August when the lake is completely obscured by clouds and fog. Visitors to Crater Lake National Park should be prepared for any kind of weather, any time of year.

Summer Conditions

The weather in May and June can vary from warm and sunny to snowy and foggy with poor lake visibility. Temperatures may be as high as 65°F (18°C) or as low as freezing. It is common to have 3 to 10 feet of snow still on the ground.

July, August, and September are your "best bets" for dry, warmer weather. A typical daytime high temperature during these three months is around 67°F (19°C), but can range from 40°F to 80°F or more (4°C to 27°C). Temperatures cool off rapidly in the evening, with a typical nighttime low around 40°F (4°C), while some summer nights dip below freezing.

October usually presents cool but sunny days and brings the start of winter snowfall by mid-month.

Summer thunderstorms occur from June through mid-September, bringing dramatic displays of lightning and high winds. Boat tours, guided hikes and evening programs may be cancelled if lightning is present in the park.

Winter Conditions

From October to June, Crater Lake National Park is a snow-covered wilderness. November through April is assuredly snowy with poor visibility and fair to poor driving conditions, but wonderful skiing and snowshoeing opportunities. With snowfall still lingering on the ground in early July, winter defines Crater Lake more than any other season.

Snowfall averages 524 inches (1,331 cm) annually, and by early spring, it is typical to have ten to fifteen feet (4 meters) of snow on the ground. While snowfall is common in the Cascade Mountains, Crater Lake National Park is one of the snowiest areas in the Northwest where regular records are kept.

The National Park Service began recording weather infromation at the park's headquarters in 1926. The winter of 1932-33 still holds the record for total snowfall in a single season with 879 inches (2,230 cm). In 1950, Crater Lake set a state record for snowfall in a single calendar year with 903 inches (2,294 cm). The most snow ever recorded on the ground at Park Headquarters was 21 feet (6.4 meters) on April 3, 1983.

Typical winter temperatures range from a high of about 35°F (2°C) to an overnight low around 19°F (-7°C).

Weather Statistics

Crater Lake National Park Weather Statistics
National Weather Service records 1931-2005

More details may be found at
www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?orcat

Month	Average High (°F)	Average Low (°F)	Precipitation (inches)	Snowfall (inches)	Snowdepth (inches)
January	34	18	10.5	105	80
February	35	18	8.1	84	104
March	37	19	7.8	84	117
April	42	23	4.9	45	112
May	50	29	3.3	20	77
June	58	34	2.2	4	24
July	69	41	0.8	0.2	1
August	69	41	1.0	0.1	0
September	62	37	2.0	3	0
October	52	31	5.0	22	2
November	40	24	9.4	64	17
December	35	20	11.4	94	49

Why Does Crater Lake Get So Much Snow?

The major weather patterns at Crater Lake National Park originate in the Pacific Ocean. Storm events begin in the north Pacific and build in strength and moisture content over the ocean. Wind patterns at these northerly latitiudes move storms from the ocean to the Pacific Northwest. Over 100 inches (250 cm) of rain falls each year on the Oregon Coast. After crossing the Coast Range, storm clouds descend into the Rogue and Willamette Valleys, dropping about 30 inches (76 cm) of rain a year. As storms more eastward, the high mountains of the Cascade Range push the cool, moist air to elevations over 10,000 feet (3,000 meters) in many places. As the air rises, it cools further. Water vapor in the air condenses to form clouds, and snow crystals form within them. If there is enough moisture in the clouds, the snow begins to fall. If the termperature is warm enough, the snow melts before it reaches the ground and falls as rain.

Crater Lake, like all of the Cascade Range, is shaped by its winter snowfall. If you visit the park in the summer, try to imagine 10 feet (3 meters) of snow blanketing the ground. Then envision spreading phlox covering the roadsides in small, pink flowers. Without the snow, there would be no phlox, no streams, and ultimately, no Crater Lake.

Snow Statistics

Annual Snowfall Statistics 1931-2011